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CLAIMS

1. A method of assembling components together in sealed relationship, the components have respective mating surfaces, the method including the steps of applying to a mating surface a layer of polysulphide sealant and  
5 allowing the sealant to cure; bringing together the mating surfaces and applying a pre-determined pressure therebetween for a pre-determined period whereby to bring about a sealed joint between the two mating surfaces.
2. A method as in claim 1 in which a said layer of polysulphide sealant is  
10 applied to both mating surfaces.
3. A method as in claim 1 or 2 in which the period of application of pressure is at least 1 hour.
4. A method as in claim 3 in which the said period is between 5 and  $1 \times 10^7$  hours.
- 15 5. A method as in claim 3 in which the said period is between 8 and 1440 hours.
6. A method as in any preceding claim in which the pre-determined pressure is between 5 and 400 MPa.
7. A method as in any of claims 1 to 5 in which the pre-determined pressure  
20 is between 5 and 200 MPa.
8. A method as in any of claims 1 to 5 in which the pre-determined pressure is between 8 and 50 MPa.
9. A method as in any preceding claim in which the pre-determined pressure is applied by bolting together the two components in their final assembled  
25 configuration.

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10. A method as in any preceding claim in which the components are subject to a raised temperature during at least part of the step of applying pressure.
- 5 11. A method as in any preceding claim in which the at least one layer of polysulphide sealant is applied to a painted said mating surface.
12. A method as in claim 11 in which the layer of polysulphide sealant is applied to the painted mating surface a sufficiently short time after the paint is applied to at least substantially reduce the need for any further treatment of the painted surface prior to the application of the layer of polysulphide sealant.
- 10 13. A method as in claim 12 in which the layer of polysulphide sealant is applied to the painted surface immediately after the paint has dried.
14. A method as in any preceding claim in which the components with sealant applied are stored, including the step of applying a protective covering to the cured layer of polysulphide sealant prior to storage of the component.
- 15 15. A method as in any of claims 1 or 3 to 14, in which the mating surface to which the layer of polysulphide sealant is not applied is a painted surface.
16. A method as in any preceding claim in which the layer of polysulphide sealant applied is a transition metal oxide curing compound.
- 20 17. A method as in any preceding claim in which the layer of polysulphide sealant applied is a manganese dioxide curing compound.
18. A method as in any preceding claim in which the layer of polysulphide sealant applied is a dichromate curing compound.
19. A method as in any preceding claim in which the layer of polysulphide sealant applied is an organic-cure compound.
- 25 20. A method of assembling components together as in any preceding claim in which the components comprise aircraft structural components.

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21. A method as in claim 20 in which the aircraft structural components are used to house fuel on board the aircraft.
22. An assembly of two components for forming a fluid-tight seal together, each component having a mating surface for sealing to a mating surface  
5 of the other component, at least one said mating surface having a layer of cured polysulphide sealant thereon.
23. An assembly as in claim 22 in which the components will form part of a fuel storage system for an aircraft.
24. A method of assembling components together in sealed relationship  
10 substantially as herein described.
25. An assembly of two components for forming a fluid-tight seal together substantially as herein described with reference to the accompanying drawings.